

REMARKS/ARGUMENTS

Status of the Application

In the Non-Final Office Action mailed January 31, 2007, claims 1-13 were rejected. In the present response, no amendments to the claims were made. Thus, claims 1-13 are pending. No new matter was added.

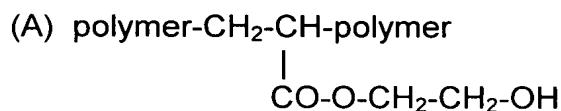
Rejections Under 35 U.S.C. §§ 102(e), 103(a)

Claims 1-13 were rejected under 35 U.S.C. § 102(e) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Stengel *et al.* (U.S. Patent No. 6,458,885). Applicants respectfully traverse these rejections.

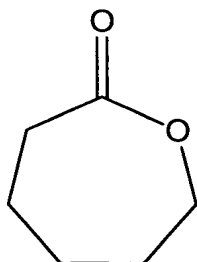
In the previous Responses filed on March 14, 2006, and August 16, 2006, Applicants explained in detail the structural differences between the product of their claimed invention and the Stengel *et al.* coating composition. In Applicants' November 14, 2006, Response to Final Office Action and Advisory Action, Applicants asserted that these previous arguments in the March 14, 2006, and August 16, 2006, Responses constituted evidence establishing nonobvious differences between the claimed product of the present invention and the coating composition of Stengel *et al.* In the January 31, 2007, Non-Final Office Action Examiner states that these previous arguments were found persuasive for overcoming these rejections. However, Examiner requested that these arguments be provided in the form of Affidavit as opposed to mere Remarks. Submitted herewith is a declaration under 37 C.F.R. § 1.132 signed by Jos Huybrechts, an inventor of the subject matter of the present application, which establishes the structural differences between the claimed invention and the invention of Stengel *et al.* The structural differences described therein are repeated below.

The present invention provides hydroxy-functional (meth)acrylic copolymers containing (1) hydroxy-functional monomers (e.g., hydroxyalkyl (meth)acrylates), (2) cycloaliphatic esters of (meth)acrylic acid, (3) other unsaturated monomers, and (4) at least one lactone; wherein, first, monomers (1) to (3) are polymerized resulting in a hydroxy-functional copolymer and then the hydroxy groups of that copolymer are modified by reaction with the lactone, resulting in a lactone-modified acrylic copolymer (see pg. 8, lines 19-22, of Applicants' specification). In the present

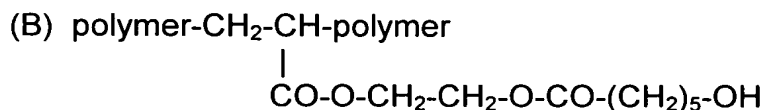
invention, the modification of the hydroxy groups of the acrylic copolymer is achieved by reacting the hydroxy group of the unit in the copolymer resulting from the hydroxy monomer, for example a hydroxy ethylacrylate structure as shown in unit (A) below:



with a lactone (ring), for example ϵ -caprolactone, as shown below

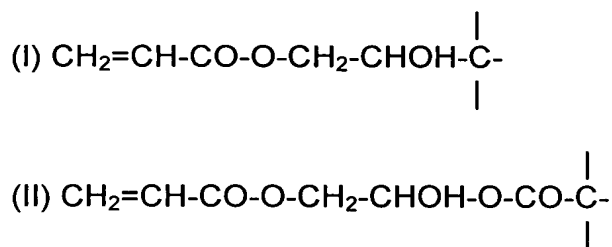


which leads to the following exemplary structure (B) in the copolymer:



In this reaction, a hydroxy alkyl ester group is again formed in the terminal position.

In contrast, the structure of the acrylic copolymer in Stengel *et al.* is (a) a monomer according to structure I or II:



wherein the terminal branched alkyl group has at least seven carbon atoms (preferred structure (a) is the (meth)acrylic acid and Cardura E reaction product (II)); (b) hydroxy alkyl (meth)acrylates; and (c) other monomers, including cycloalkyl (meth)acrylates.

Therefore, monomers (1) of Applicants' invention are disclosed in Stengel *et al.* and monomers (2) of Applicants' invention are also disclosed in Stengel *et al.*, though only in a list of possible unsaturated monomers. Lactone (4) of Applicants' invention, however, is not used to prepare the acrylic copolymer of Stengel *et al.*, that is, the hydroxy groups of the Stengel *et al.* copolymer are not modified with

lactones. The resulting structural unit (B), above, of Applicants' invention is therefore not present in the acrylic copolymer of Stengel *et al.* Stengel *et al.* therefore does not disclose the lactone-modified acrylic copolymers of Applicants' claimed invention. Hence, the acrylic copolymer of the present invention differs structurally from those of Stengel *et al.*


The acrylic copolymer of the present invention also differs from the polycaprolactone-type polyesters that can be used in the clear coats of Stengel *et al.* Those polyesters of Stengel *et al.* are reaction products formed from reaction of a cyclic lactone with a polyol or a hydroxy acid, and the resulting polyesters are separate reaction products that are not attached to the backbone of an acrylic copolymer, as in the present invention, which are attached to polymer-CH₂-CH-polymer of structure (B), above, of Applicants' invention.

Because Applicants have provided, as requested by Examiner, evidence by way of Affidavit of structural differences between Applicants' claimed product and that of Stengel *et al.*, the coating composition of Stengel *et al.* cannot anticipate or make obvious Applicants' claimed invention. Applicants therefore respectfully request withdrawal of the rejection and allowance of all claims.

SUMMARY


In view of the foregoing remarks, Applicants submit that this application is in condition for allowance. In order to expedite disposition of this case, the Examiner is invited to contact either of Applicants' representatives at the telephone numbers listed below to resolve any remaining issues. Should there be a fee due which is not accounted for, please charge such fee to Deposit Account No. 04-1928 (E.I. du Pont de Nemours and Company).

Respectfully submitted,

By: 
Hilmar L. Fricke
Reg. No. 22,384
Attorney for Applicants
Telephone No.: (302) 984-6058
Facsimile: (302) 658-1192

Dated: March 30, 2007

Respectfully submitted,

By: 
Jeffrey B. Safran
Attorney for Applicants
Reg. No.: 54,689
Telephone: (302) 984-6132
Facsimile: (302) 658-1192

Dated: March 30, 2007